ACC NR: AT7004128 SOURCE CODE: UR/3152/66/000/013/0025/0032

AUTHOR: Koryagin, V.V.; Redkolis, V.A.

ORG: none

TITLE: Phase distortions of reflections from shallow boundaries in shot grouping

SOURCE: Razvedochnaya geofizika, no. 13, 1966, 25-32

TOPIC TAGS: seismic profiling, seismic wave propagation, industrial shooting, earth crust, ~~group shots~~ seismic prospecting, seismic wave

ABSTRACT:
Experiments are described which were conducted during group shooting seismic prospecting operations in the Kuybyshev region to determine the phase distortions of waves reflected from a shallow (the uppermost) interface. To evaluate the distortions in instances involving different parameters in the grouping of shots, theoretical seismograms were compiled for (1) linear groups of 9 boreholes along bases of d = 80 and d = 140 m with wells spaced at intervals of 10 and 17.5 m, respectively, and (2) a rhomboid arrangement of 9 boreholes spaces at intervals of 15 m. The parameters of the medium

Card 1/2 UDC: none

ACC NR: AT7004128

were set at v = 2700 m/sec, h = 450 m, and $\phi = 0°$. The theoretical seismograms were compiled for a shot interval of l = 425 m. Under these conditions, the time shift of a reflected wave between the most distant seismic recorders of the array at the end of the shot interval was 0.0032 sec, while the time shift between adjacent stations was 0.0008 sec. In the case of linear groupings of the sources along extended bases ($d > \lambda$ — wave length), significant phase distortions in reflections from the shallow interface were observed and thus these reflections cannot be used to compute effective velocities. In the case of the rhombic array, almost no phase distortions occurred in recording short time reflections from shallow boundaries. In cases where it is necessary that the shots be grouped along extended bases to increase the quality of reflections from deep-seated interfaces, it is recommended that an additional single blast be set off to obtain undistorted reflections from the shallow interfaces. [DM]

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 006/ ATD PRESS: 5114

Card 2/2

[redacted], V.A.; [redacted]

Seismic prospecting of sloping [redacted] tions in the trans-Volga portion of [redacted] i prom. geofiz. no.[redacted]

L 60147-65 EWT(l)/EWT(m)/EWA(d)/EWP(t)/EWP(k)/EWP(b)/EWA(h)/EWA(c) Pf-4/Peb
JD/HW/GW

ACCESSION NR: AP5018884 UR/0387/65/000/007/0106/0114
550.834

35
33
B

AUTHOR: Zaydel'son, I. I.; Redkolis, V. A.; Rikhter, V. I.

TITLE: Use of the electrohydraulic effect in seismic prospecting

SOURCE: AN SSSR. Izvestiya. Fiziki zemli, no. 7, 1965, 106-114

TOPIC TAGS: seismography, electrohydraulic effect, seismic prospecting, seismic activity

ABSTRACT: The paper describes the electrohydraulic effect and the equipment used to generate electrohydraulic discharges in the field as a source of seismic waves. Field work is described which was carried out near Kinel' in the Kuybyshev District using an electrohydraulic source. This field work was aimed primarily at the determination of optimum characteristics for a system for seismic prospecting, using electrohydraulic discharges. Recordings of seismic waves set up by these discharges are shown and analyzed. It was found that it is theoretically possible to record reflections from sedimentary geologic strata using electrohydraulic discharges as a source. The amplitude of the seismic trace for discharge of an 87.5 mf battery of

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L 60147-65

ACCESSION NR: AP5018884

2

condensers at 24 kv, is comparable to the trace amplitude for an explosion of 20-25 gm of TNT. The optimum effect may be obtained at relatively low voltages by increasing the total capacity of the condensers. The resolution of the seismic trace when an electrohydraulic source is used is higher than for explosions while the low-frequency interference level is lower. Suggestions are given for increasing the effectiveness of the source, and for applications in fields other than seismic prospecting. Orig. art. has: 3 figures.

ASSOCIATION: Kuybyshevneftegeofizika 44

SUBMITTED: 17Feb64 ENCL: 00 SUB CODE: ES

NO REF SOV: 002 OTHER: 000

Card 2/2 dm

USSR/Thermodynamics - Thermochemistry. Equilibria. B-8
Physical-Chemical Analysis. Phase Transitions.

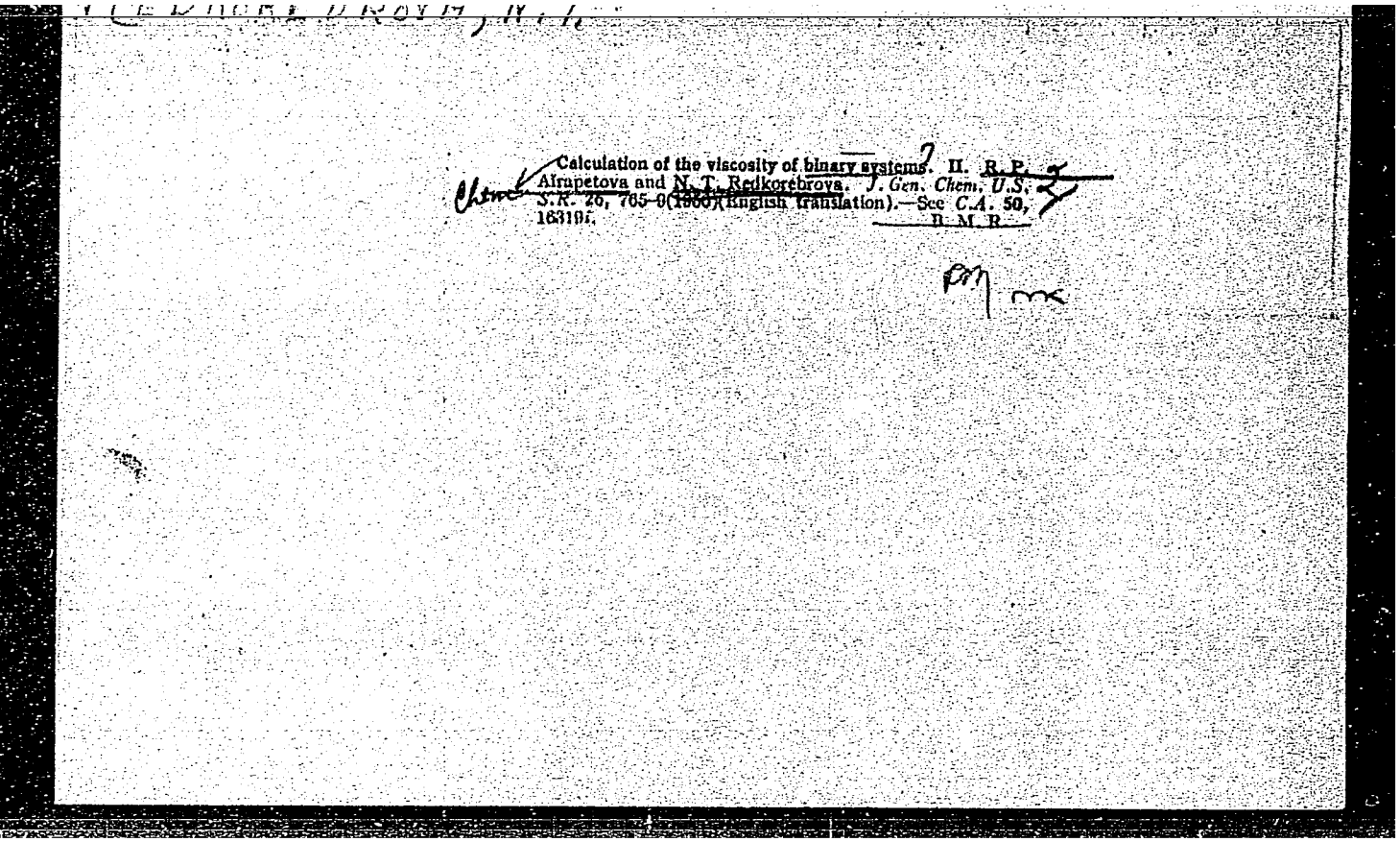
Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18532

Author : R.P. Ayrapetova, N.T. Redkorebrova.
Title : Computation of Viscosity of Binary Systems.

Orig Pub : Zh. obshch. khimii, 1956, 26, No 3, 668-672

Abstract : The viscosity and density of the systems benzene (I) - ethylbenzene (II) and I - dibromoethane (III) at 25, 45 and 65° were studied. The system I - methylacetate (IV) was studied at 25, 35 and 45°. The curves of the dependence of the molecular binding energy (in Panchenkov's sense) on the composition were plotted. The molecular weight of II, III and IV in I were determined cryoscopically. The combination of obtained data describes the system I - II as a system without chemical interaction. The systems I - III and I - IV refer to the type of expansion without chemical interaction. The curves

Card 1/2 - 210 -



Calculation of the viscosity of binary systems. II. R. P. Airapetova and N. T. Reikoretbrova. *J. Gen. Chem. U.S.S.R.* 26, 765-9(1956)(English translation).—See *C.A.* 50, 16319f.

AYRAPETOVA, R.P.; REDKOREBROVA, N.T.

Computation of the viscosity of binary systems. Part 2. Zhur. ob.khim. 26 no.3:668-672 Mr '56. (MLRA 9:8)

1. Sredneaziatskiy gosudarstvennyy universitet i Vsesoyuznyy politekhnicheskiy zaochnyy institut.
(Viscosity) (Benzene)

Red'kov, M.I.

S/020/60/133/02/09/068
C111/C222

AUTHOR: Red'kov, M.I.

TITLE: The Domain of the Values of the Functional $I = \ln \frac{w^{\lambda} \varphi'(w)^{1-\lambda} \varphi'(0)^{\nu}}{\varphi(w)^{\lambda} |\varphi(w)|^{\mu}}$ on Certain Classes of Bounded Single - Valued Functions

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 2, pp. 284-287

TEXT: Let S_1 be the class of functions $\varphi(w) = \beta w + \beta_2 w^2 + \ldots + \beta_n w^n + \ldots$, $\beta > 0$, being regular and schlicht and for which $|\varphi(w)| < 1$ in $|w| < 1$. To the class $S_1[|\varphi(w)|]$ there belong $\varphi(w) \in S_1$ which have a prescribed value $|\varphi(w)|$ in the fixed point of $|w| < 1$. To $S_1(\beta)$ there belong $\varphi(w) \in S_1$ with a given coefficient $\beta = \varphi'(0)$.

According to the method of P.P. Kufarev (Ref. 1) the author determines the ranges of values of the functional mentioned in the title in the classes S_1, $S_1[|\varphi(w)|]$ and $S_1(\beta)$. There are 3 theorems and 12 conclusions, e.g.

Card 1/2

The Domain of the Values of the Functional $I = \ln \frac{w^{\lambda}\varphi'(w)^{1-\lambda}\varphi'(0)^{\nu}}{\varphi(w)^{\lambda}|\varphi(w)|^{\mu}}$ on Certain Classes of Bounded Single-Valued Functions

S/020/60/133/02/09/068
C111/C222

Conclusion 6 : The boundary of the range of values of the functional $I = \ln \frac{w^2\varphi'(w)\varphi'(0)}{\varphi(w)^2}$ in the class S_1 is given by the equation $I_o = e^{i\alpha}\ln(1 - r^2)$, $-\pi < \alpha \leq \pi$ where the boundary itself does not belong to the set of values of the functional (I_o is boundary point).

The author mentions N.A. Lebedev. There are 2 Soviet references.

ASSOCIATION: Tomskiy gosudarstvennyy universitet imeni V.V. Kuybysheva (Tomsk State University imeni V.V. Kuybyshev)

PRESENTED: February 26, 1960, by M.A. Lavrent'yev, Academician

SUBMITTED: February 23, 1960

Card 2/2

RED'KOV, M. I.

Range of values of a functional in certain classes of bounded univalent functions. Uch. zap. TGU no. 36: 33-50 '60. (MIRA 14:5)
(Functions of complex variables)

RED'KOV, M. I.

Range of values of the functional I In $\frac{\omega^{\lambda}\varphi'(\omega)^{1-\lambda}\varphi'(0)^{\chi}}{\varphi(\omega)^{\lambda}/\varphi(\omega)/^{\chi}}$ in the class S_1. Izv. vys. ucheb. zav.; mat. no.4:134-142 '62. (MIRA 15:10)

1. Tomskiy gosudarstvennyy universitet imeni V. V. Kuybysheva.

(Functional analysis)

RED'KOV, M.I.

Range of values of the functional $I = \ln \frac{w^2 \varphi'(w)^{1-2} \varphi'(0)^{\nu}}{\varphi(w)^{\lambda}}$ in the class of S_1 [$|\varphi(w)|$]. Izv.vys.ucheb.zav.; mat. no.2:119-129 '62. (MIRA 15:8)

1. Tomskiy gosudarstvennyy universitet imeni V.V.Kuybysheva.
(Functional analysis)

REDʹKOV, N. I., Cand. Phys-Math. Sci. (diss) "Field of Values of One Functional for Several Classes of Restricted Unillnear Functions." Tomsk, 1961, 5 pp (Tomsk State Univ.) 200 copies (KL Supp 10-61, 283).

RED'KOV, M.I. (Omsk)

Coefficients of bounded univalent functions. Izv.vys.ucheb.zav.; mat. no.1:114-122 '65. (MIRA 18:3)

RED'KOV, M.I.

Domains of the values of the functional $I = \ln \frac{\omega^2 \varphi'(\omega)^{1-\lambda} \varphi(0)^{\gamma}}{\varphi(\omega)^{\lambda} (\varphi(\omega)^{\gamma}}$ on certain classes of limited univalent functions. Dokl.AN SSSR 133 no.2:284-287 Jl '60. (MIRA 13:7)

1. Tomskiy gosudarstvennyy universitet im. V.V.Kuybysheva. Predstavleno akademikom M.A.Lavrent'yevym.
(Surfaces, Representation of)

ALEKSANDROV, G.N., kand. tekhn. nauk; IVANOV, V.L., inzh.; REDKOV, V.P., inzh.

Electrical strength of an air gap between the wire of a superhigh voltage transmission line and ground in the presence of internal overvoltages. Elektrichestvo no.4:20-24 Ap '65.

(MIRA 18:5)

1. Leningradskiy politekhnicheskiy institut.

RED'KOV, V.S., inzh.

Using new surveying equipment for linear surveying.
Transp. stroi. 15 no.11:37-38 N '65. (MIRA 18:11)

REDKOV, V.V.

Carbonaceous Chestnut soils of Akmolinsk Province. Izv.AN Kazakh.SSR.Ser.bot.i pochv. no.2:16-25 '59.
(MIRA 13:5)

(Akmolinsk Province--Soils)

REDKOV, V.V.

Soil zones, subzones, and regions in TSelinograd Province. Izv. AN Kazakh.SSR. Ser. bot. i pochv. no.2:30-40 '61. (MIRA 15:2)
(TSelinograd Province--Soils)

REDKOV, Vasiliy Vasil'yevich; STOROZHENKO, D.M., otv. red.; SHEVCHUK, T.T., red.; OSTROVERKHOV, A.I., red.

[Soils of the Kazakh S.S.R. in 16 issues] Pochvy Kazakhskoi SSR v 16 vypuskakh. Alma-Ata, Nauka. No.5. 1964. 323 p. (MIRA 17:12)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut pochvovedeniya.

ROSHCHIN, G.V.; ORURK, I.A.; AKIMOVA, M.Ya.; REDKOVA, G.P.

Use of a specialized electronic network analyzer and digital computers in the study of processes in electric power systems. Sbor. rab.po vop.elektromekh.no.8:49-60 '63.

(MIRA 16:5)

(Electric network analyzers) (Electric power distribution)

REDKOVETS, N.F., inzh.

Effect of stresses below the fatigue limit on the durability of parts operating under variable loads. Vest. mashinostr. 44 no.6:26-29 Je '64. (MIRA 17:8)

REDKOZUB, B.D.; ARTEMYUK, B.T.

Selecting the built-in electric motor for hermetic system compressors. Khol.tekh. 42 no.2:14-17 Mr-Ap '65.
(MIRA 18:5)

REDKOZUB, D.

Individual plans for workers. Sov. profsoiuzy 6 no.1:68-69 Ja '58. (MIRA 11:1)

1. Nachal'nik kuznechno-pressovogo tsekha Nikolayevskogo zavoda "Dormashina".
(Forging)

MAGO, Kalman; REDL, Endre; PAPP, Gyula; MAJOR, Janos; KOMPORDAY, Aurel

Television picture tubes; also remarks by E.Redl and others.
Muszaki kozl MTA 26 no.1/4:109-122 '60. (EEAI 9:10)

1. Tavkozlesi Kutato Intezet (for Mago)
(Hungary--Television)

VALKO, Ivan Peter, a muszaki tudomanyok kandidatusa; REDL, Endre; HECKENAST, Gabor; MOLNAR, Janos; BUDINCSEVICS, A.; BODO, Zoltan

Luminescent noise of electronic tubes: also, remarks by E.Redl and others. Muszaki kozl MTA 26 no.1/4:173-182 '60. (EEAI 9:10)

1. Budapesti Muszaki Egyetem, Elektroncsotechnikai Tanszek (for Valko)
(Electron tubes)

[illegible], V.

"In an Automobile School." p. 8,
(CHEKHOSLOVENSKA AUTO, Vol. 3, No. 19, Sept. 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EAL), LC, Vol. 4
No. 5, May 1955, Uncl.

REDLBACHER, F. G.

Development and present state of 'beer' bottling technique. F. G. Redlbacher (*Brauer u. Malzer*, 1954, 7, No. 4, 3–6).—A review with descriptions and illustrations of various types of bottling plant. P.S.A.E.

HEBER, Karoly

Further development of the mechanization of traditional building methods. Magy ep ipar 11 no.11:516-517 '62.

REDLICH, Franciszek

Treatment of diphtheria. Pediat. polska 29 no.7 Suppl.:22-27 9 Sept. 54.
(DIPHTHERIA, therapy.)

GLOKSIN, W.; REDLICH, F.; TRONCZYNSKI, M.

Treatment of diphtheria with aureomycin. Pediat. polska 28 no.7:723-727 July 1953. (CIML 25:4)

1. Of the Second Pediatric Clinic (Head--Prof. F. Redlich, M.D.) of Lodz Medical Academy.

REDLICH, Franciszek; MARGOLIS, Alina

Clinic of reticuloendotheliosis; a case of Hand-Schuler-Christian disease. Pediat.polska 30 no.1:53-56 Jan 55.

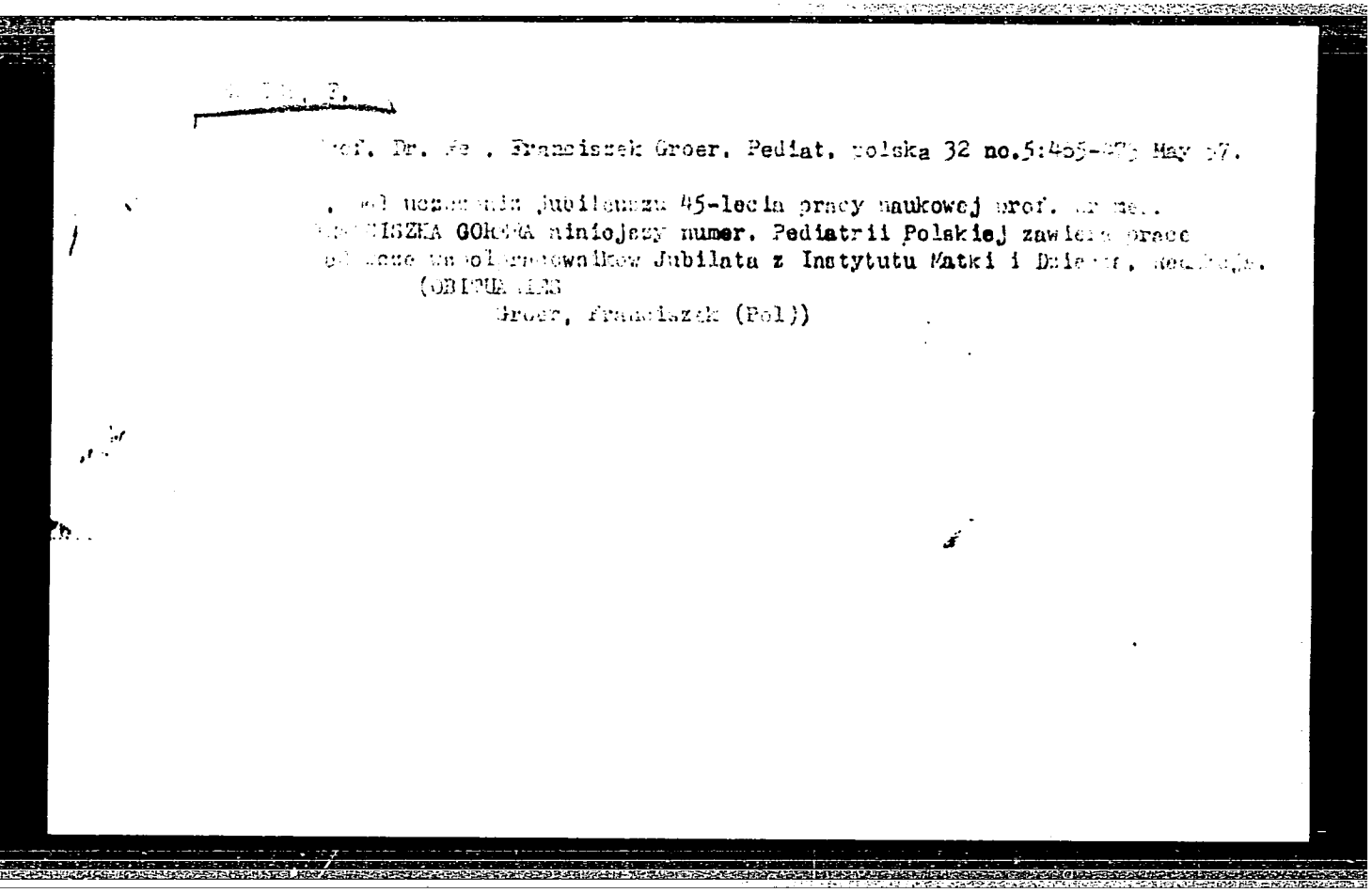
1. Z II Kliniki Chorob Dzieci A. M. w Lodzi Kierownik: prof. dr med. Fr. Redlich. Adres: Lodz, Armii Czerwonej 15.
(LIPOIDOSIS,
Hand-Schuler-Christian synd. in inf. and child.)

REDLICH, Franciszek

Scientific silhouettes of members of the Polish Academy of Sciences, Franciszek Groer. Nauka Pol 9 no.4:75-81 O-D '61.

2271. REDLICH F. and MARZYŃSKA St. Srmii Czerwonej 15, Łódź. *Znaczenie szkoły matek dla oświaty sanitarnej. The importance of maternity schools in public health PEDIAT.POL. 1954, 29/1 (111-114)

Report on extremely intensive sociopaediatric work. The number of maternity schools in Poland was increased to 130 during the period 1952-1953. The municipal prenatal care centre of the city of Lodz alone trained 8670 persons by abbreviated courses of only 2 days' duration. This 'Blitz' system was necessary in view of the fact that pupils, who came from all levels of the working population, including medical students and social workers, were too busily engaged already to be able to afford more time. It is stated that this programme will indubitably exert a favourable influence on the health of infants in general. Mayerhofer - Zagreb



Prof. Dr. Fe . Franciszek Groer. Pediat. polska 32 no.5:465-[illegible] May 57.

. ... Jubileuszu 45-lecia pracy naukowej prof. ...
... NISZKA GOROWA niniejszy numer. Pediatrii Polskiej zawiera prace
... Jubilata z Instytutu Matki i Dziecka, ...
(OBIPUA 4:8)
Groer, Franciszek (Pol))

RADZIMINSKI, A.; REDLICH, Fr.; GLOKSIN, W.

Apparatus for intubation in direct laryngoscopy. Otolar. polska 9 no.3:279-280 1955.

1. Z II Kliniki Chorob Dzieci A.M. w Lodzi. Kierownik: prof. dr. Fr. Redlich. Z Kliniki Otolaryngologicznej A.M. w Lodzi. Kierownik: prof. dr. A.Radziminski.
(LARYNGOSCOPY, apparatus and instruments, vor intubation in direct laryngoscopy)

RADZIMINSKI, A; REDLICH, Fr; GLOKSIN, W. REDLICH, Fr., prof. dr.; Lodz, Armii Czerwonej 19.

Principles and technic of laryngoscopy for pediatric use. Pediat. polska 30 no.4:361-366 Apr '55.
(LARYNGOSCOPY,
in pediatrics technic)

REDLICH, Franciszek

Regional specialist and his role in the improvement of open therapy. Pediat. polska 29 no.8:835-840 Aug 54.
(PUBLIC HEALTH,
in Poland)

REDLICH, Franciszek; MARZYNSKA, Stefania

Significance of schools for mothers in health education. Pediat pol 29 no.1:111-114 Ja '54. (EEAL 3:8)

1. Otrzymano: 18.IX.1953)
(MATERNAL WELFARE,
*in Poland, prenatal maternal educ.)

BASZCZYNSKI, J.; BODALSKI,J.; HORSKI,S.; JAROSIK,N.; KWIATKOWSKA,M.; MACIEJEWSKI,A.; REDLICH,J.

Morgagni-Adams-Stokes syndrome in a 10-year-old boy; clinical death and resuscitation by prolonged direct heart massage. Kardiol.pol. 6 no.4:259-265 '63.

1. Z II Kliniki Pediatrycznej AM w Lodzi (kierownik:prof. dr. F.Redlich); z Kliniki Chirurgii Dzieciecej AM w Lodzi (kierownik: prof.dr. A.Maciejewski) i z Kliniki Neurologicznej AM w Lodzi (kierownik: prof. dr. E.Herman).

*

DEBIEC, Barbara; NOWICKI, Stanislaw; REDLICH, Jerzy

A case of gasoline poisoning in a 21-month-old infant. Pediat. pol. 39 no.1:57-60 Ja'64

1. Z II Kliniki Chorob Dzieci AM i WAM w Lodzi; Kierownik: prof.dr.med. F.Redlich.

*

CZECHOSLOVAKIA /Chemical Technology. Chemical Products and Their Application - Fats and oils. Waxes. Soap. Detergents. Flotation reagents J-11

Abs Jour : Referat Zhur - Khimiya, No 2, 1958, 6078

Author : Zvolsky K., Redlich P.

Inst : Not given

Title : Chromatography in the Industry of Fats

Orig Pub : Prumysl potravin, 1955, 6, No 11, 559

Abstract : It is shown that it is possible to separate, by the chromatographic method, 7 pure fat acids (lauric, myristic, palmitic, stearic, butyric, linolenic and erucic).

Card 1/1

BACH, Laszlo, okleveles gepeszmernok; REDLING, Albert, okleveles mernok

The "RBP" pipeline system. Energia es atom 16 no.7:315-323 Jl '63.

1. Kelenfoldi Hoeromu.

LADIK, Janos (Budapest, II., Pusztaszeri ut 57/69); [illegible] (Budapest, II., Pusztaszeri ut 57/69); REDLY, Judit (Miss) (Budapest, II., Pusztaszeri ut 57/69)

Research on the electronic structure of 1-benzene-azo-N-phenyl-2-naphthylamine chelate. Pt.1. Acta chimica Hung 38 no.4:393-403 '63.

1. Central Research Institute for Chemistry, Hungarian Academy of Sciences, Budapest, and State Institute for Statistics, Budapest.

[illegible], I.

[illegible]'s Theory of Microhardness and Its Practical Application; a book review. p. 198 (Kohaszati Lapok. Budapest Vol. 11, no. 6, June 1956 Ontode. Vol. 7, no. 0)

SO: Monthly List of East European Accessions (EEAI) LC., Vol. 6, no. 7, July 1957 Uncl.

REDNIKOV, VSEVOLOD ANATOL'YEVICH

MUZHICHKOV, Vasiliy Ivanovich, inzhener; REDNIKOV, Vsevolod Anatol'yevich, inzhener; RIDEL', E.I., kandidat tekhnicheskikh nauk, redaktor; VERINA, G.P., tekhnicheskiy redaktor

[Hoisting cranes for railroad operations (construction, operation and repair)] Gruzopod"emnye krany na zheleznodorozhnom khodu (ustroistvo, eksplustatsiia i remont). Moskva, Gos.transp.zhel-dor. izd-vo, 1957. 463 p. (MLRA 10:9)
(Cranes, derricks, etc.)

[redacted], K.

A [redacted] professional naval books. p. 147

[redacted] (Chemelna Organizacja Technicana, Instytut Morski i Morski Instytut Chemicki) Gdansk, Poland, Vol. 7, no. 5, May, 1959

[redacted] Vol. 2, no. 7, August, 1959

Unol.

REL'MAN, O.V.

Effect of excessive soil moisture on the process of tuber development in potatoes. Uch.zap.Ped.inst.Gerts. 249:295-302 '63.

(MIRA 17:12)

1. Leningradskiy gosudarstvennyy pedagogicheskiy institut imeni A.I. Gertsena. Kafedra botaniki.

REDNIKIN, A.

Grigorii Reva and his followers. Mashinostroitel' no.12:2-3 D '62. (MIRA 16:1)

(Kramatorsk--Machinery industry)

EXCERPTA MEDICA Sec.9 Vol.11/5 Surgery May 1957
REDKO S. M.

2542. REDKO S.M. The diagnosis and surgical treatment of diaphragmatic hernia (survey of papers presented to the Editorial Board) KHIRURGIJA (Mosk.) 1955, 1 (55-57) (Russian text)
In 1951 Korbelnikow presented collective statistics on 268 cases of traumatic diaphragmatic hernia. Among 97 patients who underwent an operation for incarcerated diaphragmatic hernia there were 38 cures; the mortality was 61%. In this survey of 8 papers 11 cases of diaphragmatic hernia are discussed, including 6 left-sided and 5 right-sided herniae. Special mention is made of Gamow's report, which states that, in a case of artificial pneumoperitoneum, an air bubble in the cup of the hernia in the thoracic cavity was visualized radiologically and this was used as an aid in the diagnosis of the condition. Issajew reports on a patient with 3 diaphragmatic herniae found after 3 stab wounds in the left hemithorax were inflicted; the transverse colon was incarcerated in one of the orifices; only omentum was found in the other 2 hernial sacs. The patient died on the table as a result of shock. Dorofejenko and Rasumnaja report on a case of unrecognized diaphrag-

2542 CONT.

matic hernia with incarceration which was treated for left-sided pyopneumothorax; the patient died 3 days after admission. Autopsy showed incarceration of the transverse colon and, in the left pleural cavity, an effusion of 4 l. of foul-smelling sanious fluid was found. It is pointed out that the majority of patients were treated in rural hospitals rather than in major institutions. The fact that 6 out of 10 patients were treated by transpleural surgery under local operation, and that 5 out of 6 cases of incarcerated diaphragmatic hernia were cured, shows the increase in the skill of rural surgeons.

LINCHEVSKIY, O.A.; NEDKOKASHINA, M.S.

Developing new grape varieties. Trudy Alma-At. bot. sada 4:100-110 '59. (MIRA 12:12)
(Alma-Ata--Grape breeding)

REDMAN, Irena

Ten years of editorial activities in the field of professional maritime books. Tech gosp morska 11 no.1:4-6 Ja '61.

1. Wydawnictwo Morskie, Gdynia.

REDMAN, Irena, dr. (Gdynia)

Freight broker in socialist overseas transportation. Tech gosp morska 14 no.3:69-70 Mr'64

REDNIC, LIENA

(4)

Bucharest, *Farmacia*, Vol X, No 4, Apr 1962 (continued)

8. "New Aspects in Ophthalmologic Magistral Formulas. Antibiotics Associated with Various Chemical Products," Farm Elena REDNIC; pp 243-246.

9. "Contributions to the Study of the Determination of Alkaloids in Belladonna Tincture," Farm Elena IOACHIMESCU and Farm Florentina PLATON. Work performed at the Institute for the State Control of Drugs and Pharmaceutic Investigations (Institutul pentru Controlul de Stat al Medicamentului si Cercetari Farmaceutice); English summary; pp 247-250.

2/2

MIZHIKOV, Vasiliy Ivanovich; REDNIKOV, Vsevolod Anatol'yevich; SOBAKIN, V.V., red. [deceased]; MEL'NIKOV, V.Ye., red.

[Weight-lifting rail cranes; design, operation and repair] Gruzopod"emnye krany na zheleznodorozhnom khodu; ustroistvo, ekspluatatsiia i remont. Izd.2., dop. i perer. Moskva, Transport, 1964. 455 p. (MIRA 17:6)

REDNIKOV, Yu., gvardii podpolkovnik, voyenno-letnyy [illegible] pervogo klassa;
SHIL'YAKOV, A., gvardii podpolkovnik, voyenno-letnyy [illegible] pervogo klassa

Commands are flying through the air. Av. i kosm. 43 no.11:51-55 N '65. (MIRA 18:10)

KOKHANOVA, L.V., REDNIKOVA, T.A.; STARKOV, S.P., YEGIDIS, F M ; TARANENKO, A.S.; ZOLOTAREVA, K.A.

Ion-exchange resins as catalysts in organic synthesis. Part 2: Arylalkylation of n-cresol with styrene on KU-1 and KU-2 cation exchange resins. Zhur. org. khim. 1 no.4:648-649 Ap '65. (MIRA 18:11)

1. Nauchno-issledovatel'skiy institut khimikatov dlya polimernykh materialov i Tambovskiy gosudarstvennyy pedagogicheskiy institut.

REDO, Tadeusz, inz.

Pioneer efforts leading to mechanization and automation. Przem mat bud 9 no.12:1,3 Mr '62.

REDOROV, R., inzh.

Tails of meteors, wandering clouds, and the echo of distant television broadcast stations. Nauka i zhizn' 29 no.5:65-68 My '62.
(MIRA 15:11)

(Television--Receivers and reception)

LEONOV, M. R.; REDOSHKIN, B. A.; SHUSHUNOV, V. A.

Radiochemical investigation of the reaction of cumene hydroperoxide with cumene. Zhur. ob. khim. 32 no.12:3959-3962 D '62. (MIRA 16:1)

(Cumene) (Hydroperoxide) (Radiochemistry)

24818
S/081/61/000/011/010/040
B105/B203

5.3400

AUTHORS: Redoshkin, B. A., Shushunov, V. A., Kurochkin, N. I.

TITLE: Oxidation kinetics of cyclohexyl benzene by oxygen

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 11, 1961, 62-63, abstract 11B451.(Tr. po khimii i khim. tekhnolog. (Gor'kiy), 1960, vyp. 1, 3-8)

TEXT: The rate of oxidation of cyclohexyl benzene (I) does not depend on the pressure p of O_2 at p>200 mm Hg and on the initial amount of (I); with temperature increasing from 115 to 140°C, it grows rapidly. The apparent activation energy of the gross process is equal to 24 kcal/mole. The yield in hydrogen peroxide of (I) drops during the reaction which, in the authors' opinion, indicates the presence of induced decomposition of the hydrogen peroxide of (I), as well as an acceleration of its thermal decomposition under the action of the decomposition products.
[Abstracter's note: Complete translation.]

Card 1/1

REDOZUBOV, D. V.

Solving linear heat problems for a unformly moving boundary in a semi-infinite region. Zhur. tekhn. fiz. 30 no.6:606-610 Je '60. (MIRA 13:8)

1. Uchebno-konsul'tatsionnyy punkt Vsesoyuznogo zaochnogo politekhnicheskogo instituta, Vorkuta.
(Thermodynamics)

REZCHKOVA, C.S.

Special type of pairs of T-congruences. Uch. zap. MGPI no.208: 177-189 '63.

Special type of orthogonal pairs of T-congruences. Ibid.:190-196 (MIRA 17:6)

REDL, A.

"A survey of Tungsram's vacuum-technical products." p. 17

HUNGARIAN HEAVY INDUSTRIES. (Magyar Kereskedelmi Kamara). Budapest, Hungary.
No. 24, Winter 1959 (i.e. 1958/59)

Monthly list of East European Accessions (EEAI), LC, Vol 8, No. 8,
August 1959
Uncla.

REDLING, I.

Specialization and postgraduate education in Czechoslovakia.
Sov.med. 23 no.4:143-148 Ap '59. (MIRA 12:6)

1. Zam. direktora Instituta usovershenstvovaniya vrachey v Prage (Chekhoslovakiya).
(EDUCATION, MEDICAL,
postgraduate, in Czech. (Rus))
(SPECIALISM,
in Czech. (Rus))

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67753

SOV/126-8-5-5/29

AUTHORS: Shur, Ya.S., Shtol'ts, Ye.V., Kandaurova, G.S., and Redneva, L.V.

TITLE: The Temperature Dependence of Magnetic Properties of MnBi Alloy Powder Samples with Magnetic Texture

PERIODICAL: Fizika metallov i metallovedeniye, Vol 8, 1959, Nr 5, pp 678-684 (USSR)

ABSTRACT: The authors studied the temperature dependence of magnetic properties of samples made of the MnBi alloy powder. This alloy has a very high magnetic anisotropy constant K at room temperature (Ref 4) and a high value of the critical particle size, d_{cr} (below this size the powder particles exist in monodomain state only). On lowering of temperature the value of K falls sharply and this is accompanied by a sharp fall of the critical particle size d_{cr}, which is a function of K. It follows that on lowering of temperature the magnetic structure of MnBi alloy powders will be altered (a polydomain-monodomain transition will occur) and this change of structure will affect some magnetic properties. Consequently we can make some deductions about the structure of this magnetically uniaxial material from

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SOV/126-8-5-5/29

The Temperature Dependence of Magnetic Properties of MnBi Alloy Powder Samples with Magnetic Texture

the temperature dependence of its magnetic properties. The alloy was produced by heating powders of Mn and Bi together at 300 °C and its coercive force was of the order of 1000 Oe. The alloy was powdered mechanically and several fractions of the powder with particle size from 2 to 20 u were obtained. Samples were made from each fraction by mixing the powder with a binder and by placing this mixture in a disk-like form and allowing it to set between two poles of an electromagnet. In this way magnetically textured samples were obtained whose texture axis lay along the direction of the electromagnet field. Magnetic properties were measured between 20 and -150 °C using a ballistic throw method. Samples were demagnetized at the temperature at which a particular set of measurements were carried out by a suitable constant magnetic field in the reverse direction. The angular dependences of the coercive force and residual magnetization were obtained, magnetization curves were recorded and dependence of the residual magnetization (for partial magnetization cycles) on the magnitude of H

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The Temperature Dependence of Magnetic Properties of MnBi Alloy Powder Samples with Magnetic Texture

the maximum field used to magnetize the sample were found. The main results are given in Figs 1-4. Fig 1 shows the angular dependence of the coercive force of a sample made from powder with 6 μ particle size at temperatures of +20, -40, -65, -90 and -150 °C (curves 1-5 respectively). The abscissa represents φ which is the angle between the texture axis and the direction of the magnetic field used in measurements. The ordinate represents the ratio of the coercive force H_c measured in the direction of φ and the coercive force, H_c^o, along the texture axis ($\varphi = 0^o$). Fig 2 shows the angular dependence of the relative coercive force, H_c/H_c^o, of samples made of powders with particle sizes of 20, 6, 3 and 2 μ (curves 1-4 respectively); all the results in Fig 2 were obtained at -65 °C.

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Fig 3 shows the temperature dependence of the relative residual magnetization (defined as the ratio of the residual magnetization I_r to the saturation magnetization I_s) along the texture axis of samples made of

The Temperature Dependence of Magnetic Properties of MnBi Alloy Powder Samples with Magnetic Texture

powders with 30 and 3 μ particle size (curves 1 and 2 respectively). Fig 4a shows the 20 °C dependence of the relative magnetization I/I_S (curve 1) and the relative residual magnetization I_r/I_S (curve 2) on the magnetic field intensity along the texture axis (The results of Figs 4a, 4b and 4B all refer to a sample made of powder with 6 μ particle size). Figs 4b and 4B give the same dependences at -37 °C and at -60 °C. The authors draw the following conclusions from their results. 1) On lowering of temperature the curves representing the angular dependence of the coercive force depart more and more from the theoretical curve $H_c(\varphi)$ for a monodomain sample. This is due to a decrease of the anisotropy constant and consequent lowering of the magnitude of d_{cr} as a result of which the magnetic structure of powder particles changes gradually from monodomain to polydomain type.
2) At room temperature, when the anisotropy constant K and the critical particle size d_{cr} are large, the residual magnetization produced by partial magnetization

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SOV/126-8-5-5/29

The Temperature Dependence of Magnetic Properties of MnBi Alloy Powder Samples with Magnetic Texture

cycles is close to the maximum magnetization of a complete cycle and the maximum residual magnetization is reached in the saturation field, i.e. the magnetic structure is practically monodomain. On lowering of temperature the values of K and d_{cr} decrease and the maximum residual magnetization remains close to the saturation magnetization but is reached in fields larger than the saturation field (transition structure). At low temperatures, i.e. when K and d_{cr} are low, the residual magnetization is small and is reached in fields lower than the saturation field (polydomain structure).

Card 5/5

There are 4 figures and 5 references, of which 3 are Soviet, 1 is English and 1 is French.

ASSOCIATION: Institut fiziki metallov, AN SSSR (Institute of Physics of Metals, Academy of Sciences USSR)

SUBMITTED: July 18, 1959

AUTHORS: Lebedev, O. L., Redoshkin, A. M. SOV/32-24-10-63/70

TITLE: An Apparatus for the Continuous Addition of a Liquid Under Pressure (Prisposobleniye dlya nepreryvnoy podachi zhidkosti pod davleniyem)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 10, pp 1291-1291 (USSR)

ABSTRACT: An apparatus was constructed which is used in dosing 40% caustic soda solution into an atmosphere of carbon monoxide and steam at 50 atmospheres absolute pressure and 200°. The liquid to be added to the container with compressed gas is in a tank equipped with an electromagnetic valve and connected to the gas container. In a pipe (of non-magnetic steel KI -183) there is a steel ball. Below the steel ball there is a steel rod which rises or falls together with the ball by the action of the electromagnet, thus closing or opening the inlet of the liquid to the gas container. In case the liquid reacts with the gas a sealing container with inert gas must be inserted into the pressure-balancing pipe. At a dosing rate of 10 ml/minute the amount of the liquid addition deviates by maximally 0,5 ml/minute, i. e. ± 5%. A diagram of the apparatus is given. There is 1 figure.

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SOV/32-24-10-63/70

An Apparatus for the Continuous Addition of a Liquid Under Pressure

ASSOCIATION: Gor'kovskiy politekhnicheskiy institut im. A. A. Zhdanova
(Gor'kiy Polytechnical Institute imeni A. A. Zhdanov)

Card 2/2

U S R

Parachors of six-membered cyclic compounds with two hetero atoms in ring. Yu. A. Bedov and S. R. Sergienko. *Doklady Akad. Nauk S.S.S.R.* 98, 219–22(1951).—Parachors of several O, S, and N heterocycles with 2 hetero atoms in a 6 membered ring were detd. and compared with the values calcd. from the standard unit parachor values and corrections suggested by previous workers (Arbuzov, *et al.*, *C.A.* 42, 8559*h*; Voronkov, *C.A.* 43, 6576*d*; 44, 3769*a*). In cases of dioxane, thioxane, thiazane, dithiane, morpholine, piperazine, Et hydroxymethylmorpholine ether, Pr hydroxymethylmorpholine ether, allyl hydroxymethylmorpholine ether, 2-hydroxyethylmorpholine (I), vinyl 2-morpholinylethyl ether, Et 2-morpholinylethyl ether, Pr 2-morpholinylethyl ether and allyl 2-morpholinylethyl ether, the results agreed within 0.10–0.50 units, except for I which gave a deviation of 0.9 units, probably caused by association of the compd. For the calcn. the group parachor of NCH_2O was taken as 38.5, based on the OCH_2O value of 38.3, with correction of 0.2 taken for transition from O to N. The majority of compds. gave results of the observed parachor being 0.6 units higher than the calcd. value; this appears to call for a 0.6 unit correction for 2 hetero atoms in a *p*-position to each other. If this correction is made, the observed and calcd. values lie within 0.3 unit. The ring corrections used were those of Voronkov (*C.A.* 47, 4678*h*), since those proposed by Gibling (*C.A.* 37, 1308[1]) do not give concordant results. The detns. on dithiane and piperazine were run in dioxane solns. (Hammick and Andrew, *C.A.* 23, 3435).

G. M. Kosolapoff

REDOZUBOV, A.A.

Electric sounding with a unipolar system of electrode arrangement. Trudy Sver.gor.inst. no.34:64-71 '59. (MIRA 13:5)
(Electric prospecting)

132-10-11/13

AUTHOR: Sakovtsev, G.P. and Redozubov, A.A.

TITLE: Measuring Electric Resistivity in Prospecting for Pyrites in the Urals (Rezistovimetriya pri poiskakh kolchedannykh mestorozhdeniy Urala)

PERIODICAL: Razvedka i okhrana nedr, 1957, # 10, p 56-58 (USSR)

ABSTRACT: Hydroelectrometry can be used as a means to locate likely areas of pyrite deposits. The author described the use of the hydroelectrometer ПРП-1 (designed by A.S. Polyakov) at prospecting for pyrite in the Krasnouralsk Rayon of the Sverdlovsk oblast', and furnished a graph for conversion of resistance values into specific electrical water resistance. The example proved the practical value of hydroelectrometers when used in conjunction with geologic surveying.
There are 1 graph, 2 figures, and 2 Slavic (Russian) references.

ASSOCIATION: Sverdlovsk Mining Institute (Sverdlovskiy gornyy institut)

AVAILABLE: Library of Congress

Card 1/1

REDOZUBOV, A.A.

Using the methods of immersed electrodes and charged body. Biul. nauch.-tekh. inform. VIMS no.2:36-40 '63. (MIRA 18:2)

1. Sverdlovskiy gornyy institut.

SHUSHUNOV, V.A.; REDOSHKIN, B.A.; GOLUBEV, Yu.D.

Effect of certain factors on the rate of oxidation of cumene by oxygen and on its hydroperoxide yield. Zhur.prikl.khim. 35 no.4:832-838 Ap '62. (MIRA 15:3)
(Cumene) (Oxidation)

REDOZUBOV, D.V.

Applying circumference integrals to the solution of one dimensional problems in the theory of heat conduction [with summary in English]. Inzh.-fiz.zhur. no.1:76-78 Ja '59.
(MIRA 12:1)

1. Uchebno-konsul'tatsionnyy punkt Vsesoyuznogo zaochnogo politekhnicheskogo instituta, g. Vorkuta.
(Calculus, Operational) (Heat--Conduction)

REDOZUBOV, D.V.

On linear thermal problems with a shifting boundary. Zhur. tekh. fiz. 27 no.9:2149-2157 S '57. (MIRA 10:11)

1. Pechorskiy filial Vsesoyuznogo nauchno-issledovatel'skogo ugol'nogo instituta, Vorkuta.
(Thermodynamics)

57-9-30/40

AUTHOR: Redozubov, D.V.

TITLE: On Linear Thermal Problems with a Mobile Boundary (O lineynykh teplovykh zadachakh s odnoy dvizhushcheysya granitsey)

PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 9, pp. 2149 - 2157 (USSR)

ABSTRACT: The general mathematical formulation of a onedimensional thermal problem with a mobile boundary for its given law of motion for the semiinfinite domain of $0 < x < \infty$ is given. The given law of motion is a function $y(t)$ at the condition $y(0) = 0$. The general problem consists of two independent problems: The one for the domain $0 < x < y(t)$ and the other for the domain $y(t) < x < \infty$. The tasks were solved in principle, but these solutions lead to the necessity of a system of integral equations of the Fredholm- and Volterra type. Here a solution for $0 < x < y(t)$ is given without having to resort to solving these integral equations, but only for one single case. To this case there correspond the following boundary conditions $u_1(y(t), t) = u_1 = \text{const.}$ and the law of motion of the mobile boundary in the shape of $y(t) = \beta \sqrt{t}$, where is a constant number. For the case, i.e. the domain $y(t) < x < \infty$ more favorable solutions could be

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On Linear Thermal Problems with a Mobile Boundary

found, which are demonstrated here. They are 1.): The solution of the thermal problem with a mobile boundary at zero temperature on this boundary and an initial distribution f(x) in the domain $y(t) < x < \infty$. 2.) Solution of the thermal problem with a mobile boundary with a zero initial distribution and a given temperature on the same boundary for the domain $y(t) < x < \infty$. In conclusion the generalization of the onedimensional thermal problem with a mobile boundary is given for the entire domain $0 < x < \infty$. From the physical point of view such a generalizing problem expresses the phase process (melting and freezing) on the mobile boundary y(t) if a thermal source with an efficiency of ψ (t) acts on this boundary. There are 2 tables and 5 Slavic references.

ASSOCIATION: Pechora Branch of the "VUGI", Vorkuta
(Pechorskiy filial VUGI, Vorkuta)

SUBMITTED: February 22, 1957

AVAILABLE: Library of Congress

RED'KO, Yu.D., kandidat tekhnicheskikh nauk.

Condenser tube corrosion in maritime areas electric power plants. Trudy kom. po bor'. s korr.met. no.1:127-136 '51. (MLRA 10:8)
(Condensers (Electricity)--Corrosion)

BELYAYEVA, Ye.M.; FEDOROVA, T.A. (Moskva)

Data on electrophoretic investigation of the protein composition of organs and tissues. Usp. sovr. biol. 53 no.2:137-151 Mr-Ap '62. (MIRA 15:5)

(ELECTROPHORESIS) (PROTEINS IN THE BODY)

LEBEDEV, O.L.; REDOSHKIN, A.M.

Device for the continuous feed of liquid under pressure. Zav. lab. 24 no.10:1291 '58. (MIRA 11:11)

1. Gor'kovskiy politekhnicheskiy institut imeni A.A.Zhdanova.
(Chemical laboratories--Equipment and supplies)

REDOZUBOV, D. V.

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5-10-110 V.

551.525.5

Redozubov, D. V. **Thermal field laws of the permafrost in the Vorkuta region.** Translation by Leonid Stambul-Sheik and Jaroslav Jan Peel from the orig. Russian in *Akademiia Nauk SSSR. Institut Merzlotovedeniia im. V. A. Obrucheva*, Vol. I, 1946. *U. S. Snow, Ice and Permafrost Research Establishment, Translation*, No. 17, Feb. 1954. 20 p. 9 tables, 12 figs., 9 refs. DLC—General laws governing the thermal field in permafrost are developed and applied to the dynamics of the freezing process in the Vorkuta region. Temperature curves computed theoretically are compared with curves of temperature measured in mine shafts to a depth of 160 m. It is found that a slow rising of the lower boundary of the permafrost (at present at 131 m) is taking place and the thermal field of the permafrost undergoes a slow change, while the climate does not change. *Subject Headings:* 1. Permafrost changes 2. Vorkuta Region, USSR. I. Stambul-Sheik, Leonid (*trans.*) II. Peel, Jaroslav Jan (*trans.*). —G.T.

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S/169/61/000/011/022/065
D228/D304

AUTHOR: Redozubov, A.A.

TITLE: Electric probing with unipolar equipment

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1961, 27-28, abstract 11A243 (Tr. Sverdl. gorn. in-ta, no. 34, 1959, 64-71)

TEXT: Sulfide deposits of the Central Urals usually occur among shales with a low resistance. The distinguishing of the zones of maximum electro-conductivity caused by commercial mineralization is difficult under such conditions. Unipolar AMNA equipment is sometimes used to solve this problem. The horizontal component of the current density equals zero at the center of such equipment in a unipolar medium. The vertical component of the current density which also equals zero at the surface, reaches its maximum value at a certain depth which is connected with the equipment's size. Thus, in the presence of a particular heterogeneity near the device, there is a certain optimum electrode-dispersion, during which the maximum

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anomaly effect from this heterogeneity is observed. As is shown by the results of the cited calculations, and also by field and modeling observations, the extent of anomalous objects in depth may be judged from graphs of the anomaly intensity's dependence on the dimensions of the feeder equipment and from sections of the anomaly intensity; this enables anomalies due to the influence of electroconductive shales and ore deposits to be separated. In the author's opinion the proposed method gives clearer results than is the case with vertical electric problings. [Abstractor's note: Complete translation].

Card 2/2

SAKOVTSEV, G.P.; POTKIN, F.M.; REDOZUBOV, A.A.

Geological and geophysical characteristics of Novo-Shaytanka pyrite deposits in Central-Urals, Kirovograd region. Izv. vys. ucheb. zav.; tsvet. met. no.2:3-10 '58. (MIRA 11:8)

1. Sverdlovskiy gornyy institut, Kafedra geofizicheskikh metodov razvedki.

(Ural Mountains--Pyrites)

SAMOVTSEV, G.P.; REDOZUBOV, A.A.

Measuring electric resitance in prospecting for pyrite fields in the Ural region. Razved. i okh. nedr 23 no.10:56-58 O '57. (MIRA 11:2)

1. Sverdlovskiy gornyy institut.
(Ural Mountain region--Pyrite ores)
(Water, Underground) (Electric resistance)

S/169/62/000/005/035/093
D228/D307

AUTHOR: Redozubov, A. A.

TITLE: The change of the survey depth in the average gradient method in different parts of the profile

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 5, 1962, 34, abstract 5A266 (Tr. Sverdl. gorn. in-ta, no. 40, 1961, 92-97)

TEXT: The results of impedance calculations at different points of the average gradient profile are presented for a two-layer medium. A pallet is given for introducing corrections into the impedance values for the change in the survey depth in various parts of the profile. A practical example is considered for one of the copper-ore districts of the South-Urals. The magnitude of an anomaly, created by an ideally conducting sphere located in different parts of the profile, is estimated by a calculation method and as a result of a laboratory experiment. It is concluded that in the case of a horizontally layered medium the impedance depends on

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The change of the ...

the observation point's position in relation to the feed ground-connections, and also that in the search for local objects the survey depth near the feed ground-connections decreases negligibly. It is suggested that the profile's working part should be increased to 0.75 AB when operating by the average gradient method. It is recommended that some of the isoline method's electrode anomalies in the Urals should be reappraised. [Abstracter's note: Complete translation.]

Card 2/2

REDOZUBOV, D. V.

A method for determining the phase changes of water in soil. D. V. Redozubov. *Colloid J. U.S.S.R.* 17, 133–4 (1955)(Engl. translation).—See *C.A.* 49, 9849*d*.

H. L. H.

USSR

REDOZUBOV, D. V.

USSR

A method for determining the phase changes of water in soil. D. V. Redozubov (Pechora Branch, Sci. Research[illegible] Inst. [illegible] *Kolloid. Zhur.* 17, 347- (1955).—A Zn and a Cu electrode are thrust into the ground. When the ground moisture freezes, the current between the electrodes greatly decreases. J. J. Silverman

REDOZUBOV, D.V.

Solution of some linear heat problems in a limited semi-infinite domain with moving boundary by the use of the $\beta\sqrt{t}$ law. Zhur.-tekh.fiz. 32 no.5:632-637 My '62. (MIRA 15:7)

1. Gornyy institut imeni G.V.Plekhanova, Leningrad.
(Heat--Conduction)

S/057/62/032/005/018/022
B104/B102

AUTHOR: Redozubov, D. V.

TITLE: The solution of some types of linear heat problems in bounded and semi-infinite regions when the boundary moves in accordance with the $\beta\sqrt{t}$ law

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 5, 1962, 632 - 637

TEXT: The differential equations

$$\frac{\partial U_1}{\partial t} = a_1^2 \frac{\partial^2 U_1}{\partial x^2} \quad 0 < x < y(t) \qquad (2.1)$$

$$\frac{\partial U_2}{\partial t} = a_1^2 \frac{\partial^2 U_2}{\partial x^2} \quad y(t) < x < \infty \qquad (2.2)$$

are solved for the boundary and initial conditions of the first kind $U_1(0,t) = \psi_1(t)$ (2.3), $U_1(y(t),t) = U_2(y(t),t) = \psi_2(t)$ (2.4), $U_2(x,0) = 0$ (2.5) under the assumption that $\psi_i(t) = A_i t^{n/2}$ holds and the motion of

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The solution of some types...

the boundaries is described by $y(t) = \beta\sqrt{t}$. n is zero or an integer, A_i and β are constant numbers, $\beta > 0$. Under these assumptions the system has closed particular solutions of the form

$$(4t)^{n/2} i^n erfc \frac{\pm x}{2a_i\sqrt{t}}, \qquad (2.8).$$

$$i^n erfc(\pm y) = \int_{\pm y}^{\infty} i^{n-1} erfc\, v\, dv$$

$$i^0 erfc(\pm y) = erfc(\pm y) = 1 - \frac{2}{\sqrt{\pi}} \int_0^{\pm y} e^{-\alpha^2} d\alpha$$

The general solution is sought in the form

$$U_1(x, t) = C_1 (4t)^{n/2} i^n erfc \frac{x}{2a_1\sqrt{t}} + C_2 (4t)^{n/2} i^n erfc \frac{x}{2a_1\sqrt{t}} \qquad (2.9)$$

$$U_2(x, t) = C_3 (4t)^{n/2} i^n erfc \frac{x}{2a_2\sqrt{t}}, \qquad (2.10)$$

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The solutions of the problem are obtained for boundary conditions of the second kind at the moving boundary in the bounded region and for boundary conditions of the third kind in the semi-infinite region.

ASSOCIATION: Gornyy institut im. G. V. Plekhanova Leningrad (Mining Institute imeni G. V. Plekhanov, Leningrad)

SUBMITTED: April 17, 1961 (initially), June 19, 1961 (after revision)

Card 3/3

REDOZUBOV, D.V.

Stefan's problem for the case of linear initial temperature distribution in a semifinite medium. Izv. AN SSSR. Ser. geofiz. no.4: 558-561 Ap '62. (MIRA 15:4)

1. Leningradskiy gornyy institut im. G.V.Plekhanova.
(Heat--Transmission) (Frozen ground)